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## A new species of *Charidotella* WEISE from Hispaniola (Coleoptera: Chrysomelidae: Cassidinae)

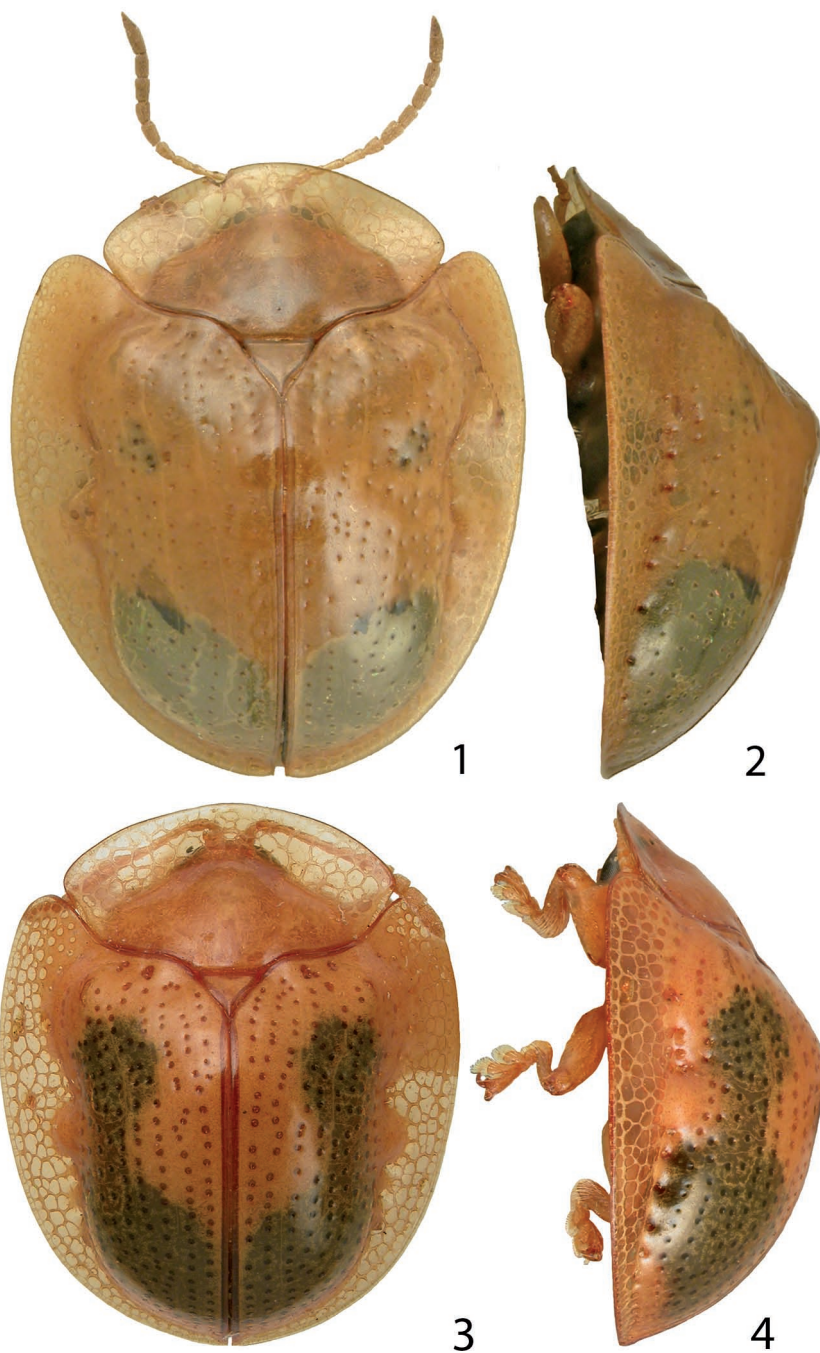
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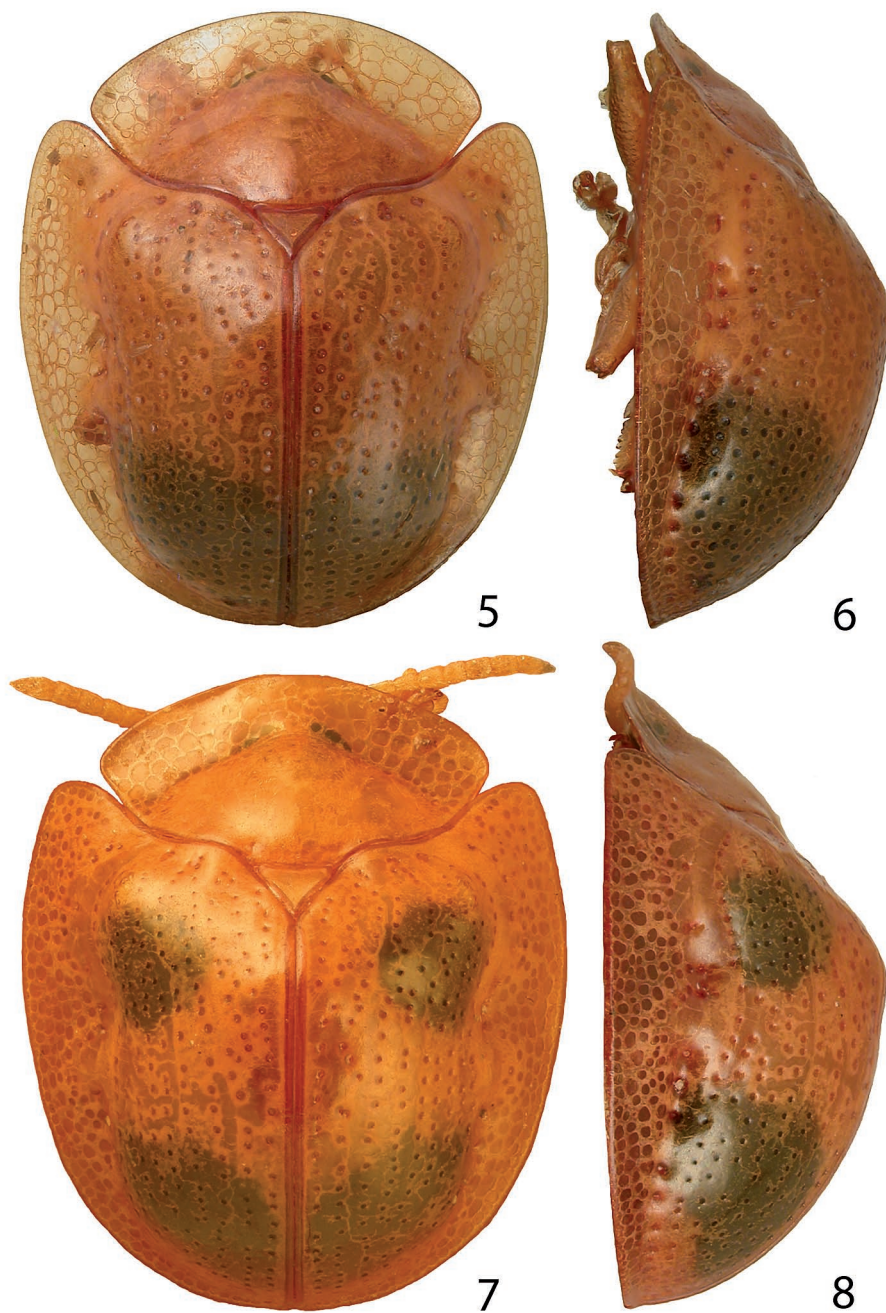
ABSTRACT. *Charidotella dominicanensis* n. sp. is described from Dominican Republic. It belongs to the *Ch. preusta* (BOH.) subgroup known only from the Greater Antilles. Colour photographs of the new species and its two relatives are also given.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, Greater Antilles, Dominican Republic.

The genus *Charidotella* WEISE, 1896 comprises 99 species divided into 5 subgenera (BOROWIEC 1989, BOROWIEC & ŚWIĘTOJAŃSKA 2011). The most speciose is nominotypical subgenus with 72 species. Members of the subgenus are distributed in almost whole New World from southern Canada to northern Argentina, but most of species occur in tropical part of South America. They are usually small beetles with length below 6 mm and dorsum uniformly yellow. The nominotypical subgenus is taxonomically difficult, diagnostic characters are mostly subtle and concerning structure of clypeolabial part of head (clypeal grooves, clypeus convexity, shape of impressions on clypeal plate), colour of the antennae, shape of principal impression of elytral disc, elytral convexity and special pattern of dorsum. In some species the elytral pattern occurs not only on the upper side but also or only on the underside of elytra and is well visible in fresh specimens and partly disappears in dried preserved specimens. A key to this group of species was recently published by BOROWIEC (2007). Within this group with pattern on underside of elytra a small subgroup of species distributed only in Greater Antilles and characterized by especially large dark pattern of underside of elytra is easily distinguished. The group comprises hitherto *Charidotella jamaicensis* (BLAKE, 1966) from Hispaniola and Jamaica, *Charidotella praeusta* (BOHEMAN, 1855) from Hispaniola and Jamaica, and



1,2. *Charidotella dominicanensis* n. sp.: 1 – dorsal, 2 – lateral; 3, 4. *Charidotella jamaicensis*, specimen from Barahona, Dominican Republic



5, 6. *Charidotella praeusta*, specimen from Port au Prince, Haiti: 5 – dorsal, 6 – lateral; 7, 8. *Charidotella quadrisignata*, specimen from Santiago de Cuba, Cuba: 7 – dorsal, 8 – lateral

*Charidotella quadrisignata* (BOHEMAN, 1855) from Cuba and Hispaniola. In material studied recently I found two specimens from Hispaniola representing a new species of this characteristic subgroup of *Charidotella*. Its description is given below.

Exact label data are cited for all type specimens; a double slash (//) divides data on different labels and a single slash (/) divides data in different rows. Type localities are cited in the original spelling.

***Charidotella dominicanensis* n. sp.**

ETYMOLOGY

Named after its terra typica, Dominican Republic of Hispaniola island.

DIAGNOSIS

A member of subgroup of species from Greater Antilles close to *Ch. praeusta* characterized by at least large dark spot on the apex of elytral underside and often also with more or less developed pattern of in the anterior part of elytral underside. The largest species of the group with length 5.95-6.35 mm (*jamaicensis*: 4.0-5.0 mm, *praeusta*: 4.1-4.45 mm, *quadrisignata*: 4.75-5.45 mm), with the most convex elytral disc, slightly tuberculate in postscutellar area (fig. 2) while in all relatives elytral disc is from almost regularly convex to slightly humped (figs. 4, 6, 8). Elytral pattern forms a large apical spot and a small spot under principal impression of disc (fig. 1), while in *Ch. praeusta* only apical spot usually occurs (figs. 5, 6). *Ch. quadrisignata* has always large apical spot and large spot in subhumeral part (figs. 7, 8), and *Ch. jamaicensis* have subhumeral and apical spot coalescent by broad band along elytral sides (figs. 3, 4).

DESCRIPTION

Length: 5.95-6.35 mm, width: 4.95-5.40 mm, length of pronotum: 1.95-2.20 mm, width of pronotum: 3.25-3.70 mm, length/width ratio: 1.18-1.20, width/length ratio of pronotum: 1.67-1.68. Body almost circular (fig. 1).

Pronotum and scutellum yellow. Elytra yellow, disc on underside in apical 1/3 length with large, dark spot (black in a fresh specimen, opaque in dried specimens), in coarse punctate area of principal impression on underside of elytron small, dark spot (fig. 1). Clypeus, ventrites, legs and antennae uniformly yellow.

Pronotum ellipsoidal, without basal or anterior angles, on sides subangulate, with maximum width slightly before the middle. Disc moderately convex, its surface smooth and shiny. Explanate margin broad, smooth and shiny, transparent with honeycomb structure.

Scutellum triangular. Base of elytra much wider than pronotum, humeral angles moderately protruding anterad, obtuse. Disc strongly, irregularly convex, in postscutellar area with large hump, appears slightly tuberculate. Punctuation of disc fine and sparse, forms regular rows, distance between punctures mostly much wider than puncture diameter, in principal impressions and on sides of disc punctures slightly coarser than in sutural part of disc and on apex. Marginal row distinct, its punctures only slightly



coarser than on disc, sparse, distance between punctures much wider than puncture diameter, humeral fold obsolete, lateral fold very narrow nor obsolete. Intervals much wider than rows, their surface smooth and shiny. Explanate margin of elytra moderately declivous and moderately broad, in the widest part slightly more than four times narrower than disc, its surface smooth and shiny, transparent, with honeycomb structure. Apex of elytral epipleura bare.

Eyes large, gena obsolete. Clypeus 1.4 times as wide as long, its anterior margin slightly elevated, apex forms obtuse triangle, clypeal plate with shallow impression apically. Labrum shallowly emarginated. Antennae moderately long, slim, segments 9 and 10 slightly longer than wide, length ratio of antennal segments: 100:42:39:53:47:50:53:53:53:95, segment 3 only slightly shorter than segment 2, segment 4 approximately 1.4 times as long as segment 3. All claws with large basal tooth.

#### TYPE MATERIAL EXAMINED

Holotype: "REP DOMINICA, / La Vega, Constanza, /5 km SE of Jarabacoa, /busty vegetation, 600 m, // N 19°05,706', / W 70°37,016', 24.XI. /2003, leg. J. Kontschán" (preserved in Hungarian Natural History Museum, Budapest, Hungary); paratype: "DOMINICAN REPUBLIC: / La Altagracia, Parque / del Este, 2.9 km SW / Boca de Yuma, / 18-21-51N, 68-37-05W, / 11 m, 28 May 2004 // J. Rawlins, C. Young, / C. Nunez, J. Fetzner / semihumid dry forest, / limestone, hand col- / lected, Sample 52144 // Carnegie Museum / Specimen Number / CMNH-307.703" (preserved in Monte L. Bean Life Science Museum, Brigham Young University, Provo, USA).

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